IN THE UN PATENT AND TRADEMARK OFFICE

In re application of:

Jens-Christian Meiners, et al.

Group Art Unit:

Examiner:

Serial No.:

10/596,706

Filed:

June 22, 2006

For:

STREAMS, **METHOD** FOR MIXING FLUID

MICROFLUIDIC MIXER AND MICROFLUIDIC CHIP

**UTILIZING SAME** 

Attorney Docket No.: UOM 0324 PUSA

## INFORMATION DISCLOSURE STATEMENT **UNDER 37 C.F.R. § 1.97(b)**

Mail Stop Amendment Commissioner for Patents U.S. Patent & Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and §§ 1.97-1.98, the references listed and identified on the attached Forms PTO/SB08A and/or SB08B are being submitted herewith for consideration by the Examiner. This statement is being filed in accordance with 37 C.F.R. § 1.97(b).

While this Statement is being filed in compliance with the duty of disclosure,

CERTIFICATE	OF MAILING	UNDER 37	C.F.R.	§ 1.8	(FIRST	CLASS MAI	L)

I hereby certify that this paper, including all enclosures referred to herein, is being deposited with the United States Postal Service as first-class mail, postage pre-paid, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, U.S. Patent & Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 or

April 17, 2007

**Date of Deposit** 

David R. Syrowik

Name of Person Signing Signature citation of the listed references is not to be construed as an admission that any of the references are "material" as defined under 37 C.F.R. § 1.56(b).

No copies of the listed U.S. patent references or the listed U.S. patent application publication references have been included herewith pursuant to 37 C.F.R. § 1.98(a)(2). All other references have been provided as required. Consideration and entry into the record of the listed references is respectfully requested.

Respectfully submitted,

Jens-Christian Meiners, et al.

By:

David R. Syrowik Reg. No. 27,956

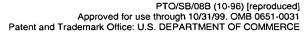
Attorney/Agent for Applicant

Date: April 17, 2007

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Substitute for Form 1449B/PTO

**INFORMATION DISCLOSURE** 

Complete if Known

Application Number 10/596,706

Filling Date June 22, 2006

First Named Inventor Jens-Christian Meiners

Group Art Unit

Examiner Name

STATEMENT BY APPLICANT

(use as many sheets as necessary)

Examiner Name of 2 Attorney Dock

Attorney Docket Number UOM 0324 PUSA

## OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), Examiner Τ² Initials Cite No.1 publisher, city and/or country where published. UNGER, MARC A., ET AL., Monolithic Microfabricated Valves and Pumps by Multilayer Soft Lithography, Science, Vol. 288, April 7, 2000, pp. 113-116. THORSEN, TODD, ET AL., Microfluidic Large-Scale Integration, Science, Vol. 298, October 18, 2002, pp. 580-LIU, JIAN, ET AL., A Nanoliter Rotary Device For Polymerase Chain Reaction, Electrophoresis 2002, 23, pp. 1531-1536. STROOCK ABRAHAM D., ET AL., Chaotic Mixer For Microchannels, Science, Vol. 295, January 25, 2002, pp. 647-651. LIU, ROBIN H., ET AL., Passive Mixing in a Three-Dimensional Serpentine Microchannel, Journal of Microelectromechanical Systems, Vol. 9, No. 2, June 2000, pp. 190-197. THERRIAULT, DANIEL, ET AL., Chaotic Mixing in Three-Dimensional Microvascular Networks Fabricated by Direct-Write Assembly, Nature Materials, Vol. 2, April 2003, pp. 265-271 , 347. BESSOTH FIONA G., ET AL., Microstructure for Efficient Continuous Flow Mixing, Anal. Commun., 1999, 36, pp. 213-HESSELL, V., ET AL., Laminar Mixing in Different Interdigital Micromixers: I. Experimental Characterization, AICHE Journal, March 2003, Vol. 49, No. 3, pp. 566-577. DERTINGER, STEPHAN K.W., ET AL., Generation of Gradients Having Complex Shapes Using Microfluidic Networks, Analytical Chemistry, Vol. 73, No. 6, March 15, 2001, pp. 1240-1246. DUFFY, DAVID C., ET AL., Rapid Prototyping of Microfluidic Systems in Poly(dimethylsiloxane), Analytical Chemistry, Vol. 70, No. 23, December 1, 1998, pp. 4974-4984. CHEN, HAO, ET AL., Robust Interconnects and Packaging for Microfluidic Elastomeric Chips, Analytical Chemistry, Vol. 75, No. 19, October 1, 2003, pp. 5287-5291

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Substitute for Form 1449B/PTO				Complete if Known			
INFORMATION DISCLOSURE				Application Number	10/596,706		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	June 22, 2006		
				First Named Inventor	Jens-Christian Meiners		
				Group Art Unit			
(use as many sheets as necessary)				Examiner Name			
Sheet	2	of	2	Attorney Docket Number	UOM 0324 PUSA		
OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS							
Examiner Initials					T ²		
	SONG, HELEN, ET AL., A microfluidic System for Controlling Reaction Networks in Time, Angew. Chem. Int. Ed. 2003, 42, No. 7, pp. 768-772.						
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Examiner	Date	
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